

CYP2C8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7995a

Specification

CYP2C8 Antibody (N-term) - Product Information

Application WB.E **Primary Accession** P10632 Reactivity Human Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG 55825 Calculated MW Antigen Region 74-105

CYP2C8 Antibody (N-term) - Additional Information

Gene ID 1558

Other Names

Cytochrome P450 2C8, CYPIIC8, Cytochrome P450 IIC2, Cytochrome P450 MP-12, Cytochrome P450 MP-20, Cytochrome P450 form 1, S-mephenytoin 4-hydroxylase, CYP2C8

Target/Specificity

This CYP2C8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 74-105 amino acids from the N-terminal region of human CYP2C8.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CYP2C8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP2C8 Antibody (N-term) - Protein Information

Name CYP2C8 {ECO:0000303|PubMed:7574697, ECO:0000312|HGNC:HGNC:2622}

Function A cytochrome P450 monooxygenase involved in the metabolism of various endogenous



substrates, including fatty acids, steroid hormones and vitamins (PubMed: 11093772, PubMed:14559847, PubMed:15766564, PubMed:19965576, PubMed:7574697). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed: 11093772, PubMed: 14559847, PubMed: 15766564, PubMed: 19965576, PubMed: 7574697). Primarily catalyzes the epoxidation of double bonds of polyunsaturated fatty acids (PUFA) with a preference for the last double bond (PubMed: 15766564, PubMed: 19965576, PubMed: 7574697). Catalyzes the hydroxylation of carbon-hydrogen bonds. Metabolizes all trans-retinoic acid toward its 4-hydroxylated form (PubMed: 11093772). Displays 16-alpha hydroxylase activity toward estrogen steroid hormones, 17beta-estradiol (E2) and estrone (E1) (PubMed:14559847). Plays a role in the oxidative metabolism of xenobiotics. It is the principal enzyme responsible for the metabolism of the anti-cancer drug paclitaxel (taxol) (PubMed: 26427316).

Cellular Location

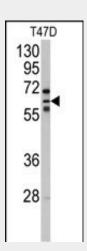
Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

CYP2C8 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CYP2C8 Antibody (N-term) - Images



Western blot analysis of anti-CYP2C8 Antibody (N-term) (Cat.#AP7995a) in T47D cell line lysates (35ug/lane). CYP2C8(arrow) was detected using the purified Pab.

CYP2C8 Antibody (N-term) - Background

CYP2C8 is a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and





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synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by phenobarbital. The enzyme is known to metabolize many xenobiotics, including the anticonvulsive drug mephenytoin, benzo(a)pyrene, 7-ethyoxycoumarin, and the anti-cancer drug taxol.

CYP2C8 Antibody (N-term) - References

Adjei, G.O., Antimicrob. Agents Chemother. 52 (12), 4400-4406 (2008) Aquilante, C.L., Hum. Genomics 3 (1), 7-16 (2008) Nelson, D.R., Pharmacogenetics 14 (1), 1-18 (2004)